

Solving Linear Systems Using the Addition Method

Solve each linear system by addition. If the system is inconsistent, write *no solution*.

1. $x + y = 10$
 $x - y = 2$ _____

2. $x + y = 11$
 $x - y = 5$ _____

3. $-x + 3y = -1$
 $x - 2y = 2$ _____

4. $5x + 4y = 2$
 $-5x - 2y = 4$ _____

5. $x + y = 7$
 $x + 3y = 11$ _____

6. $x + 2y = 13$
 $x + y = 7$ _____

7. $4x - 3y = -2$
 $4x + 5y = 14$ _____

8. $2x - 3y = 23$
 $9x - 3y = 30$ _____

9. $x + 2y = 10$
 $3x - y = 9$ _____

10. $3x + y = 7$
 $-x + 4y = 2$ _____

11. $2x - 5y = 11$
 $-4x + 10y = 18$ _____

12. $5x + y = 12$
 $x - 4y = 15$ _____

13. $7x - 2y = -22$
 $4x - 5y = -28$ _____

14. $3x - 4y = 9$
 $2x + 5y = 6$ _____

15. $2x = 7y + 29$
 $5x + 4y = 8$ _____

16. $7x - 3y = 1$
 $2y = 5x$ _____

17. $0.3x + 0.4y = 0.8$
 $0.7x - 0.8y = -6.8$ _____

18. $0.02x - 0.03y = 0.07$
 $0.06x - 0.09y = 0.05$ _____

19. $3x + 5y = 1$
 $6x = 2 - 10y$ _____

20. $14x + 2y = 10$
 $x - 5y = 11$ _____

Applications

21. **Algebra** The sum of two numbers is 50. The difference of the two numbers is 4. Find the two numbers. _____

22. **Geometry** Two angles are supplementary. One is three times the other. Find their measures. _____

MIXED PRACTICE

Solve each linear equation.

23. $5x - 4 = 3x - 10$ _____

24. $4x + 3(x - 1) = x - 15$ _____

25. $3(2x + 1) = 7(x + 1)$ _____

26. $x - 10 = 2(x + 5)$ _____